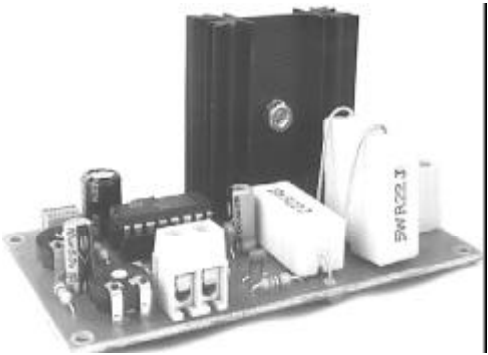
HIGH-Q velleman-kit

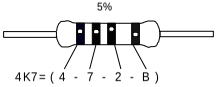
K8004

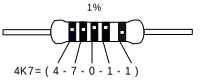
DC to PULSE WIDTH MODULATOR

- PWM range: 0 to 100%
- PWM frequency: 100 to 5000Hz adjustable
- Minimum PWM offset: 0 to 20% adjustable
- Adjustable sensitivity: 2.5 to 35VDC
- Short circuit protection
- Overload protection: 6.5A
- Under-Voltage lockout: 7VDC typ.
- Soft start
- Power Supply: 8 to 35VDC unregulated
- Supply current (No load): 35mA typ
- Efficiency: better than 90% at full load
- Dimensions (wxdxh): 85 x 48 x 45mm

modifications reserved





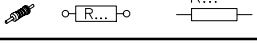


CODE	I CODICE COLORE	P CODIGO DE CORES	E CODIGO DE COLORES	SF VÄRI KOODI	S FÄRG SCHEMA	DK FARVE-KODE	N FARGE-KODE	D FARB KODE	GB COLOUR CODE	F CODIFI-CATION DES COU-LEURS	NL KLEUR KODE	CODE
0	Nero	Preto	Negro	Musta	Svart	Sort	Sort	Schwarz	Black	Noir	Zwart	0
1	Marrone	Castanho	Marrón	Ruskea	Brun	Brun	Brun	Braun	Brown	Brun	Bruin	1
2	Rosso	Encarnado	Rojo	Punainen	Röd	Rød	Rød	Rot	Red	Rouge	Rood	2
3	Aranciato	Laranja	Naranjado	Oranssi	Orange	Orange	Orange	Orange	Orange	Orange	Oranje	3
4	Giallo	Amarelo	Amarillo	Keltainen	Gul	Gul	Gul	Gelb	Yellow	Jaune	Geel	4
5	Verde	Verde	Verde	Vihreä	Grön	Grøn	Grønn	Grün	Green	Vert	Groen	5
6	Blu	Azul	Azul	Sininen	Blå	Blå	Blå	Blau	Blue	Bleu	Blauw	6
7	Viola	Violeta	Morado	Purppura	Lila	Violet	Violet	Violet	Purple	Violet	Paars	7
8	Grigio	Cinzento	Gris	Harmaa	Grå	Grå	Grå	Grau	Grey	Gris	Grijs	8
9	Bianco	Branco	Blanco	Valkoinen	Vit	Hvid	Hvidt	Weiss	White	Blanc	Wit	9
A	Argento	Prateado	Plata	Hopea	Silver	Sølv	Sølv	Silber	Silver	Argent	Zilver	A
B	Oro	Dourado	Oro	Kulta	Guld	Guld	Guldl	Gold	Gold	Or	Goud	B

Velleman-kit

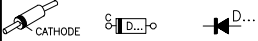
A P8004

1



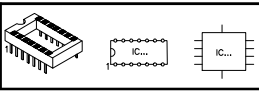
R1, R2: 220 (2-2-1-B)
R3,R4: 2K2 (2-2-2-B)
R5: 10K (1-0-3-B)
R6: 100K (1-0-4-B)
R7: 220K (2-2-4-B)

2



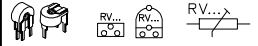
D1,D2: 1N4148
D3: 1N4000...1N4007

3



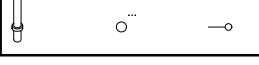
IC1: 16P

4



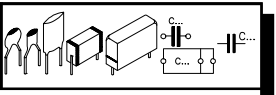
RV1,RV2: 10K
RV3: 220K

5



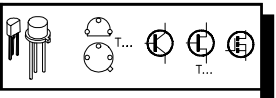
V_{REF}

6



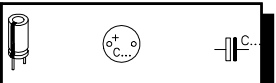
C1...C4: 100nF (104 - µ1)

7



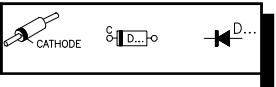
T1: BC547

8



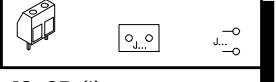
C5,C6: 10µF
C7: 100µF (40Vmin.)

9



D4: 6A2 / 6A6

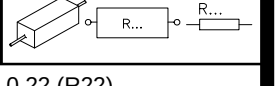
10



J1...J3: 2P (!)

11

5W



R8: 0,22 (R22)

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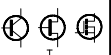
12

5W

R9,R10: 0,22 (R22)

13



T2: BUK555-60B or eq. (!)

14

IC1: 3524 (!)

FIG. B

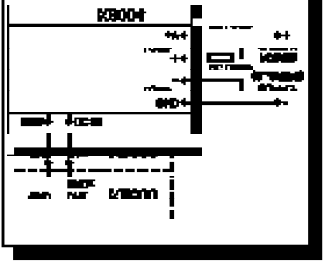


FIG. C

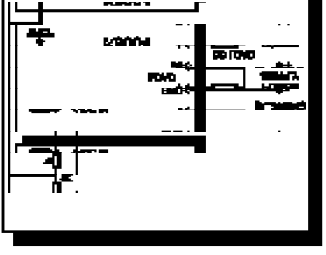
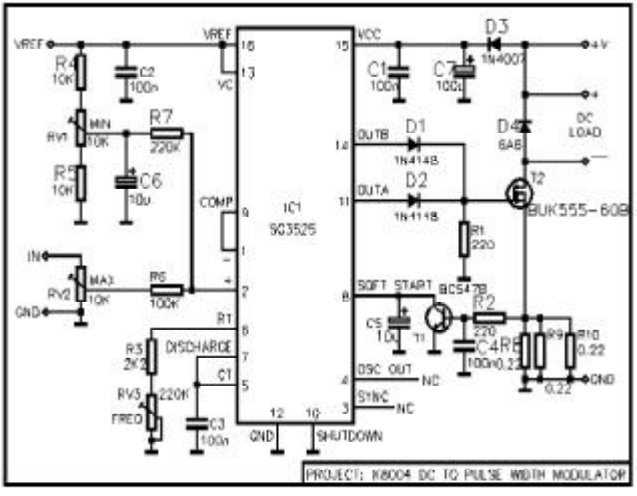
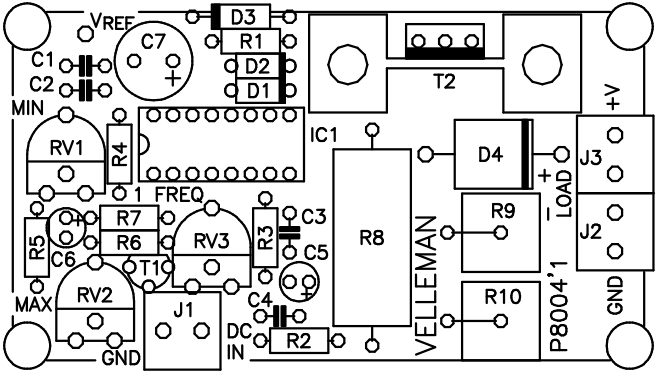


FIG. A


VREF
R4
10K
C2
100n
VREF
VC
MIN
RV1
10K
R7
220K
R5
10K
C6
10u
COMP
IC1
SG3525
IN
MAX
RV2
10K
R8
100K
GND
R1
R3
2K2
DISCHARGE
C1
RV3
220K
FREQ
C3
100n
GND
SHUTDOWN
VCC
C1
100u
C7
100u
D3
1N4007
+V
D4
6A8
DC
LOAD
OUTB
D1
1N4148
OUTA
D2
1N4148
T2
BUK555-60B
R1
220
SOFT START
BC547B
C5
10u
T1
R2
220
C4
100n
R6
0.22
R9
0.22
R10
0.22
GND
OSC OUT
NC
SYNC
NC
PROJECT: K8004 DC TO PULSE WIDTH MODULATOR


VREF
C7
D3
R1
C1
C2
D2
D1
T2
+V
MIN
RV1
R4
IC1
D4
J3
1
FREQ
LOAD
R7
R6
R5
C6
RV3
R3
C3
C5
R8
R9
J2
T1
MAX
RV2
J1
C4
R10
GND
DC
IN
R2
VELLEMAN
P8004'1
GND